

### **REMARKS**

Claims 1-9, 11-14, 18, 21, 23-25, 29-31, and 35-42 are pending in this application. Independent claims 1, 21, 23, and 29 are sought to be amended to include respective limitations from dependent claims 36, 38, 40, and 42, and dependent claims 13 and 41 are sought to be amended for minor formality. Claims 36, 38, 40, and 42 are sought to be cancelled. The Applicants believe the amendments place this case in condition for allowance, and the Examiner is kindly asked to enter this amendment and remarks in accordance with the provisions of Rule 116(a).

The Applicants note with appreciation the Examiner's acknowledgement of the information disclosure statements filed in April and September of 2008.

Claims 1, 2, 4-7, 13, 18, 21, 23, 29-31, and 35-42 were rejected under 35 USC § 103(a) as being unpatentable over IEEE 802.3 2000 (IEEE 802.3) in view of U.S. 6,169,729 (Feuerstraeter), and further in view of U.S. 5,907,553 (Kelley). Also, claims 3 and 8-9 were rejected under 35 USC § 103(a) as being unpatentable over IEEE 802.3 in view of Feuerstraeter, and further in view of Kelley and IEEE 802.3 2002 (IEEE 2002). Also, claims 11, 12 and 14 were rejected under 35 USC § 103(a) as being unpatentable over IEEE 802.3 in view of Feuerstraeter, and further in view of Kelley and U.S. Publication No. 20020091884 (Chang). Also, claims 24-25 were rejected under 35 USC § 103(a) as being unpatentable over IEEE 802.3 in view of Feuerstraeter, and further in view of Kelley and U.S. 5,889,776 (Liang). Also, claims 1, 21, 23, and 29 were rejected under 35 USC § 103(a) as being unpatentable over IEEE 802.3 in view of Feuerstraeter, and further in view of Kelley and IEEE 2002.

The Applicants traverse these rejections. In addition, the Applicants have amended to more distinctly define the claimed invention, and have added new claims to define particular additional distinguishing features.

The Applicants' claims define techniques (e.g., device, system, method, etc) for negotiating a data transmission mode in a device-to-device interconnection (DDI) during a

negotiation period prior to entering an operational mode. As previously explained, the claimed pre-operational mode link negotiation allows link negotiation and transceiver configuration to be carried out without requiring physical coding sublayers (PCS) of the transceiver to be operating, as variously defined in dependent claims 36, 38, 40, and 42. To this end, the Applicants have amended each of the independent claims to include limitations of dependent claims 36, 38, 40, and 42. More specifically, each of the claims now variously recite, in part, that the data transceiver includes a physical coding sublayer (PCS) corresponding to each of a plurality of data transmission modes and that the PCS is not enabled during the negotiation period, and enabling (or the capability to enable) the PCS to operate in a data transmission mode selected during the negotiation period. Thus, unlike conventional negotiation techniques (such as the Auto-Negotiation described in clauses 36/37 of the IEEE 802.3 reference or clause 47/48 of the IEEE 2002 reference, or so-called encapsulated autonegotiation during an operational mode, the claimed device/method/system/etc for negotiating a data transmission mode allows the PCS to be disabled during the negotiation period.

As previously explained, clause 28 is expressly limited in its stated application to twisted pair applications (such as 10BASE-T, 100BASETX, or 100BASE-T4 applications), and does not address 8B/10B code groups, let alone 8B/10B code groups on a device-to-device interconnection (DDI). In addition, the Applicants further note that page 700, clause 28.1.4 of IEEE 802.3, discloses: “Connection to technologies other than 10BASE-T, 100BASETX, or 100BASE-T4 that do not incorporate Auto-Negotiation is not supported.” (underlining added for emphasis). Despite this express language of non-support in clause 28, the Examiner suggests that IEEE 802.3 reference covers expansion to 1000Base-X and generally refers to page 962 of clause 36 and page 1009 of clause 37. As previously explained, clauses 36 and 37 have no bearing on clause 28. Before concluding otherwise, it is important to understand that the IEEE 802.3 reference is known to be a **collection of diverse IEEE standards or protocols** each addressing issues peculiar to a corresponding application. In this sense, any suggestion of expansion in clauses 36 and 37 as suggested by the Examiner would not be understood to mean expansion in clause 28. This is particularly noteworthy given the express “not supported” statement in clause 28 with respect to technologies other than 10BASE-T, 100BASETX, or

100BASE-T4. To conclude otherwise, without the benefit of having the Applicants' application in hand, would seem unnatural.

Moreover, note that the arrangement of limitations recited in the Applicants' claims has required the Examiner to cite from numerous diverse clauses (e.g., 28, 36, and 37) included in the IEEE 802.3 reference, to show anticipation of certain claimed limitations. There is case law that addresses this very point. In particular, to anticipate as explained by the Examiner, the IEEE 802.3 reference must teach "all of the limitations arranged or combined in the same way as recited in the claim." Applying this rule in *Net MoneyIn v. Verisign* (Fed. Cir. 2008), the Federal Circuit found that the reference being applied was not anticipating. In more detail, the reference in the *Net MoneyIn* case disclosed two transaction protocols, but neither protocol contained all of the elements combined in the manner claimed. The situation in *Net MoneyIn* is similar to the situation in the present application, where the Examiner is using elements from two distinct protocols (clause 28 for Auto-Negotiation expressly limited to a twisted pair, and clause 37 for Auto-Negotiation for 1000BASEX). Thus, although the IEEE 802.3 reference might anticipate a claim directed to either of the two protocols disclosed in clauses 28 or 37, it cannot anticipate the Applicants' claimed limitations as applied by the Examiner (where multiple distinct protocols are being relied upon).

With regard to the Examiner's response that the Applicants' previous arguments relevant to 8B/10B code groups "was addressed in the previous action" (Examiner's Response on page 1), the Applicants respectfully disagree and request the Examiner's reconsideration. In particular, the Applicants' last response set forth various deficiencies of that previous action. In more detail, the "previous action" referred to by the Examiner cites to clause 36 at page 967 and figure 36-3 as disclosing 8B/10B code groups. In their previous response, the Applicants acknowledged the Examiner's corresponding comments, and explained that the relied upon clauses 36 and 37 only apply when the transceiver is already configured and enabled. In contrast, the data transceiver recited by the claims is not enabled during the negotiation period. As such, the Applicants respectfully request the Examiner's clarification on this point. This discussion equally applies to chapters 47 and 48 of IEEE 2002, which discusses 8B/10B code groups in the context of a link having configured and enabled transceivers (e.g., enabled PCS and

PMA). Again, the data transceiver recited by the claims is not enabled during the negotiation period.

Thus, as previously explained, there are a number of subtle, non-trivial points associated with IEEE 802.3 and its numerous clauses (as well as IEEE 2002 and its clauses), with each clause having a particular context to which it is relevant. This relevance must be understood and taken into consideration when applying IEEE 802.3 and/or IEEE 2002 to the Applicants' claimed invention. The Applicants wish to bring this case to allowance, and kindly and respectfully request the Examiner's patience and further consideration in addressing these significant complexities.

The Applicants can find no occurrence where any of the other references of record (including Feuerstraeter, Kelley, Chang, Liang) remedy the deficiencies of IEEE 802.3 and IEEE 2002, in that none of the references, whether alone or in combination, disclose or suggest a data transceiver that includes a PCS that is not enabled during the negotiation period, and enabling (or the capability to enable) the PCS in a data transmission mode selected during the negotiation period.

For at least the reasons discussed herein, the Applicants respectfully request the Examiner's reconsideration and withdrawal of these rejections.

Favorable action is solicited. The Examiner is kindly invited to telephone Applicants' undersigned attorney (603-668-6560) to facilitate prosecution of this application.

Respectfully submitted,

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